Division 9, 10, and 11 Review of Draft Framework Workshop for Environmental Management Plan

ATTENDEES:

Tim Boland/ NCDOT DIV 10	Pat Ivey/ NCDOT DIV 9
Benton Payne/NCDOT DIV 10	Mike Shaffner/ NCDOT DIV 9
Larry Thompson/ NCDOT DIV 10	Wayne Atkins/ NCDOT DIV 11
Tawana Brooks/ NCDOT DIV 10	Mike Pettyjohn/ NCDOT DIV 11
Phil Suggs/NCDOT DIV 9 & 10	Michael Poe/ NCDOT DIV 11
Diane Hampton/ NCDOT DIV 9	Ehren Meister/NCDOT OEQ
Heath Slaughter/ NCDOT DIV 11	Don DeWolfe/CH2M HILL
Neil Trivette/ NCDOT DIV 11 & 12	JD Solomon/CH2M HILL
David Spainhour/ NCDOT DIV 9	Kathryn Benson/CH2M HILL

FROM: CH2M HILL

DATE: November 15, 1:00 PM

Division 9, 10, and 11 employees met on November 15th in the Division 9 conference room to review and discuss the Environmental Management Plan (EMP). The objectives of the meeting were to present the draft framework, obtain feedback from Division and District staff, and identify the environmental activities already being performed. The draft EMP framework was reviewed with the entire group and then the attendees split into small groups to discuss each draft framework objective in detail. This memorandum summarizes the group discussions.

Introductions and Meeting Objectives

Ehren Meister opened the meeting, introduced the CH2M HILL team, and provided a general summary of the meeting's objectives. Don DeWolfe with CH2M HILL introduced the CH2M HILL staff members and asked the North Carolina Department of Transportation (DOT) participants to introduce themselves. Don presented the goals for the Environmental Management Plan, noted that the purpose of the meeting is to obtain feedback from staff, and described how Division input will be used to develop the final EMP.

Project Background

Don identified the EMP sponsors and the core team at DOT that helped to develop the draft EMP framework. The draft framework is based upon existing DOT documents and additional information from benchmarked agencies that have excellent environmental management systems or programs. A few of the DOT documents were identified and a copy of the Environmental Stewardship Policy was distributed to the meeting attendees.

The benchmarking agencies included other State Departments of Transportation, cities, and military facilities.

JD Solomon reviewed the main goals for the EMP:

- The EMP should be clear, concise, workable, realistic, and achievable for all levels of the organization.
- The EMP will provide a way to clearly document the cost effectiveness of investments made on environmental initiatives.
- The EMP will incorporate previous environmental initiatives where applicable.
- The EMP will include methods for communicating environmental performance measures to all levels so that employees recognize and understand what the Department is doing.
- Obtain broad acceptance of the EMP from the Board, employees, and the public.

The draft EMP framework was reviewed. The meeting participants were asked to think about the questions that they will be asked to answer in the small group sessions:

- What are you already doing that supports the draft EMP Framework?
- What are you doing that is missing from the draft EMP framework?
- What draft EMP objectives are not applicable to you?

After the objectives were presented JD Solomon, asked the group to identify anything missing and to share their initial thoughts about the draft framework. There were no immediate comments to the draft framework.

Break

Small Group Sessions

After the break the meeting attendees were split into three groups. Each group reviewed the individual draft framework pieces and identified the activities they are doing under each section and any activities that don't fit under the draft framework pieces. The small group discussions were led by CH2M HILL staff. Group comments were recorded on flip charts. After each draft framework piece was reviewed, the groups came back together and CH2M HILL presented the highlights of the small group discussions.

Objective A - Ensure employee compliance with the Environmental Stewardship Policy

1) Achieve zero notice of violations (NOV) on projects, facilities, and operations
2) Conduct root cause analysis and develop recovery plans for correction of NOV occurrences

3) Build upon and enhance internal programs which demonstrate DOT's commitment to the natural and human environment

Current Activities:

- Environmental awareness training was held in Spring and Fall of 2004 for TS2 and above
- DOH sponsored a half day training event (one time) for contractors and employees which focused on policy, technology, and expectations
- Full Day training on erosion and sediment control certifications will be a project pre-qualification starting in 2006
- Division 11 holds ½ day Environmental awareness training that includes a PowerPoint presentation that highlights good and bad (including NOVs)project practices and results
- Communication regarding environmental responsibility occurs twice annually at a minimum during the performance evaluation process. Every employee has an environmentally related responsibility.
- The environmental stewardship policy is reviewed with all new employees during the orientation process
- Environmental issues are a standard agenda item at monthly staff meetings
- Division 9 invites regulatory representatives (Army Corps of Engineers) to monthly staff meetings to keep the lines of communication open
- Delegation agreement with DENR for erosion and sediment control
- Procedures are in place to avoid NOVs which include the issuing of an Immediate Corrective Action (ICA) when monthly inspection is conducted on construction and maintenance projects
- Conduct compliance audits for erosion and sediment control and permitted sites to allow for self-monitoring
- Erosion control plan should be in place and used on all projects, otherwise an ICA can be issued
- Conducted research project with North Carolina State University for erosion control issues (need Board approval)
- Root cause for an NOV is discussed with Division staff, area staff and contractors but is not a formal process
- Conduct pre-construction meetings where project permitting conditions and drawings are discussed
- Divisions use a permit inspection report to conduct permit compliance audits
- Conduct public meetings/hearings on certain projects
- Statewide Illicit Discharge and Connection flyer increases awareness of this program

Comments/Suggestions

- Human environment and cultural resources aspects seem to be left out
- Increase research cooperation with Universities
- Root cause analysis in culture
- NOV's are the right level of detail for the framework not ICAs

- Want ICAs monitored because it prevents NOVs and makes root cause analysis moot

Objective B - Ensure the compliance of DOT and industry partners with state and federal environmental laws, rules and regulations

1) Achieve zero NOVs on projects
2) Achieve zero contract violations related to or as result of adverse environmental impacts
3) Conduct root cause analysis and develop recovery plans for correction of NOV or contract violation occurrences

Current Activities

- Conduct yearly permitting training for construction management (DOT and CEI), maintenance staff, bridge maintenance staff, and now includes contractors
- Training for DOT inspectors and CEI inspectors overseeing projects will be required in 2006
- Division 11 has contract language that passes NOV penalties to contractor
- Divisions can issue stop work orders for contractors when an NOV is received
- Conduct pre-construction conference to review conditions related to permit
- Conduct monthly project meetings that include an environmental component
- The division conducts contractor training in the permitted area, BMP implementation, and environment stewardship

Comments/Suggestions

- Projects can include a traffic control superintendent and erosion control superintendent, should consider including an environmental superintendent to ensure environmental regulations and permit conditions are being met
- Industry partner expectations should be increased and have clearer consequences
- Why can OSHA safety violations (OSHA) come to contractor but not environmental regulation violations?
- Create an environmental rating and certification procedure for contractors on projects, if a contractor does not meet criteria revoke certification. Include this certification in pre-qualification process.
- NOVs need to impact Contractors financially more than a stop work order. DOT should be able to pass violation fee to Contractors.
- Should include contract clause consistently across all Divisions that includes stiff monetary penalties in contract, for NOV & ICA, or if caught by DOT (different penalties for each level of violation)
- One issue identified as a problem is inconsistent interpretation of regulations and policies. Clear and concise Agency guidance that provides methods for handling situations would be welcomed.
- Increase environmental focus in project meetings

- Need to increase project debrief meetings that focus on the positive side and develop a way to share success stories between Divisions
- After encroachment permit is issued inspections should be performed to ensure conditions were met and no drainage blockage occurs
- Design of subdivision roads should require more than a 3rd party PE certification. A post-construction inspection to ensure the provisions in the manual are met would be beneficial to check layout, ditch size, etc.

Objective C – Build upon and enhance environmental sustainability practices

1) Achieve government recycling mandates to reduce waste and reduce costs
2) Determine the technical feasibility and cost effectiveness of waste reduction measures
3) Evaluate and track additional reduction, recycling, and reuse efforts to continually improve environmental sustainability
4) Implement the Energy Policy

Current Activities

- Regular office recycling of paper, card board, plastic and aluminum cans
- Other recycling efforts include plastic, scrap metal, concrete (aggregate base course), guardrail posts, aluminum signs, tires, asphalt, fly ash, and trees are turned into mulch
- Recycle shop materials (ex. oil)
- Annual recycling form completed on an annual basis
- Only things measured are the government mandated recycling products
- Will sell scrap metal as surplus items
- Have reused buildings from plaza complex
- CPI Program rewards employee's innovative ideas
- Some projects have mandated % of recycled for project, typically TIP
- Facility upgrades take into account energy efficiency
- Green restroom planned in Wilkes County in 2007
- Paper waste reduction is encouraged by sending documents electronically when possible and printing double-sided
- Using alternative fuels, propane, bio-diesel and some electric cars or hybrid vehicles
- Conversion to LED signals reduces electricity usage

Comments/Suggestions

- Need to have a better method to capture recycling and reuse of products, especially during construction, to get credit for the amounts
- Include recycled products at rest areas (hand towels, toilet paper)
- Look at the cost-effectiveness of recycling pick up versus drop off

- Increase water conservation at times by reducing amount for dust control or reuse from erosion devices
- Use of grey water has some supporters, some are against

Objective D – Enhance air quality management

1) Identify and measure air quality impacts produced by DOT activities
2) Complete air quality analyses in non-attainment and maintenance areas on time
3) Maximize the use of available congestion mitigation and air quality improvement program (CMAQ) funds each year
4) Organize effective regional collaborations with metropolitan and rural planning organizations (MPO's and RPO's)

Current Activities

- Division involved with MPOs and RPOs
- For major TIP projects air quality is part of study
- Moving Ahead projects have eliminated intersections, etc.
- Using adjusted signal systems which are more efficient
- Using intelligent transportation components (signal control back up on ramps, weigh-station in motion, etc.)
- Using alternative fuels, propane, bio-diesel and some electric cars or hybrid vehicles
- No open burning is allowed
- Mecklenburg County has Mecklenburg Environmental Protection (will catch if vaporize fuel, etc.)
- HOV lanes in Charlotte
- Encourage mass transit (park and ride)
- Will carpool in a van to project site
- Will place work time restrictions to reduce traffic impacts (construction at night)
- Perform plantings
- Dust control occurs on projects
- Fund greenways, bike paths, walking trails, etc.
- Utilize message boards to alert the public to high ozone conditions
- Manage the time of day for vehicle fueling, numbers of vehicles, etc. to reduce ozone when levels are elevated

Comments/Suggestions

- Signal timing is important
- Divisions could work more closely with RPOs and MPOs
- Often projects are delayed due to lack of funding
- Weak air quality involvement in Divisions (except Charlotte)
- CMAQ funds used for sidewalks – does this improve air quality?

Objective E - Enhance water quality management

1) Continue to implement enhancements and BMPs related to water quality at facilities and properties
2) Track enhancement and BMP implementation efforts at the project level
3) Identify and track opportunities to enhance water quality through partnerships
4) Cooperate with watershed based approaches where possible

Current Activities

- Utilize pre-construction and ongoing construction meetings to review permitting, BMPs, and specific water quality issues associated with each project
- Will sometimes make design modifications that benefit water quality if slight increase in cost can be justified (ex. in-stream structures)
- Widen roads away from wetlands/creeks
- Will move roads to accommodate riparian buffers
- Will work with Corps of Engineers on encroachments in ROW
- Rest areas have treatment plants
- Track implementation and maintenance of BMPs at facilities (level spreaders, grass swales, ponds etc.)
- Install hazardous spill basins for projects and facilities in high quality watersheds
- Salt storage areas are covered
- Teamed with NCSU to research PAM in relation to erosion and sediment control and basin design, etc.
- Funded wetland and stream restoration EEP projects
- NPDES monitoring occurs on construction projects
- Stormwater pollution prevention plans (SWPPP) are developed for each facility and reviewed annually with twice a year inspections conducted by the County maintenance engineer
- Annual SWPPP reporting is conducted
- Conduct annual SWPPP training

Comments/Suggestions

- Would like more monitoring projects
- Need to develop an inventory of sedimentation devices and other stormwater BMPs that notes location, maintenance needs, and status
- BMPs are expensive to build and even more expensive to maintain
- Need better guidance on how to maintain BMPs
- Mitigation cost for highways, especially retrofits is too high
- BMPs need to e agreed upon up front with Resource Agencies not during the process

- Maintenance is under funded
- Need consistent mitigation requirements, not project to project or Division to Division
- Standardize requirements – less not more

Objective F – Enhance land resource management

1) Integrate local land use plans into the comprehensive transportation planning process to meet mobility, economic and environmental goals
2) Continue to manage facilities and property to enhance environmental stewardship and economical land management practices
3) Continue delegation of the erosion and sedimentation control and buffer programs

Current Activities

- MPOs and RPOs activity is helping with the protection of corridors
- Accurate traffic forecasting is an issue. In Forsyth County quarterly meetings are conducted with the county commissioners, city and DOT representatives to improve the planning process
- Advanced ROW acquisition has been done occasionally
- On existing facilities, trying to improve future accessibility
- Controlling outdoor advertising
- DOT buys land to stay in natural state. Current mitigation is 2 to 1 but may increase 4 to 1 in future. (Mitigation ratio depends on the severity of the impact)
- Funding and building "Piedmont Prairie" to protect endangered vegetation
- Moved 571 sunflower stems from a roadway widening project
- Have reduced the maintenance of right of ways to create more natural landscapes and minimize mow areas and often are just what is required for construction activity
- The Division wants to continue managing the sediment and erosion control program and feels the ICA process helps maintain this delegation

Comments/Suggestions

- Have to consider secondary and cumulative impacts
- Have no control over the integration of local land use plans into comprehensive transportation planning so this does not apply
- Increase cooperation of local land use decisions and DOT
- DOT shouldn't own more land than it needs (ex. Turtle bog – 48 acres and sunflower farm -150 acres)
- Mitigation lands should be donated so DOT doesn't have to manage them (Red-Cockaded Woodpecker lands)

- Someone else should takeover land management for the long term on properties DOT owns
- Look at delegation of buffer programs and Phase II

Objective G - Accelerate/streamline the environmental component of the project delivery process

1) Zero project delays due to permitting
2) Identify impacts, fund, and monitor the expense allocation to the EEP and other mitigation efforts
3) Identify appropriate mitigation funding sources and allocation of funds in TIP
4) Identify and track opportunities to partner with local governments and agencies to enhance the project delivery process
5) Explore delegation of environmental programs

Current Activities

- Potentially make project decisions based on mitigation costs
- At the project level pre-construction and ongoing meetings discuss permitting needs and requirements
- Used to have status meeting with Land Quality
- Have good relationships with many Resource Agencies
- Relationship with Mecklenburg County is close to a partnership
- Develop mitigation estimates for Division operations and mainantance activities for EEP use

Comments/Suggestions

- Zero project delays due to permitting is impossible
- For zero project delays due to permitting it is critical to know and agree on requirements up front with resource Agencies
- EEP is supposed to have helped with streamlining permitting – has it really? (Mitigation battles have continued)
- Has the merger process really streamlined permitting?
- DEO program has helped communication and understanding (very positive change)
- DOT should not be "punished" by Resource Agencies; The Resource Agencies don't understand DOT mission
- PDEA seems a little dysfunctional - turnover of project level employees conducting the negotiations impacts projects
- Divisions can't do modifications to permits on TIP projects – PDEA wants to do initial permit and modifications

- There is too much of a changing regulatory landscape and there needs to be more agreement up front in project process
- DOT could act as a facilitator more proactively
- Would be interested in being delegated permitting responsibilities from DWQ

Objective H – Implement and maintain the initiatives, programs and process improvements

1) Implement the Environmental Management Plan
2) Develop a comprehensive shared GIS database
3) Continue to enhance training and awareness of the environmental ethics of the Department
4) Develop a risk management plan

Current Activities

- Environmental stewardship awareness training was conducted statewide
- Conduct monthly erosion and sediment control audits (good practice)
- Level II contractor certification is required
- ITRE training is encouraged for maintenance related employees
- Using GIS already for stream mitigation sites, etc.
- Documenting BMP retrofits and evaluating performance and maintenance requirements

Comments/Suggestions

- Need to increase accountability related to training
- Need to improve quantity and quality of training
- Create a basic environmental training program that the Divisions can implement
- Training people early is key
- Current training in University curriculums should include environmental components
- Need to create incentives for environmental achievements
- Would like to pursue awards and recognition for environmental performance
- Communication is key to staying out of trouble with the environment
- Should use available GIS data and avoid reinventing data
- Have a goal to locate all facilities related to roadways
- EMP needs to be practical to achieve buy-in at the project or maintenance level
- The DEO could be used to help implement the EMP
- The implementation of online EMP tools similar to the SWPPP tools would be beneficial to streamline the recording process

Summary and Conclusions based on Small Groups

The human environment and cultural resources elements seem to be left out of the framework. The draft framework item that was identified as having little application at the

Division level was the integration of local land use plans into the comprehensive transportation process.

The Division staff would like the contractors to meet increased expectations and have clear consequences when these expectations are not met. This includes financial responsibility for violations issued to DOT. A consistent contract clause across the DOT to this effect would be positive. Pre-qualifying contractors based on environmental criteria would also be welcomed.

There needs to be a better method to capture the recycling and reuse, especially during the construction phase of projects to get credit for some of the good things DOT is already doing. DOT shouldn't be in land management and shouldn't own more land than it needs.

The goal of zero project delays due to permitting was not believed to be achievable. Inconsistent interpretation of regulations by the Resource Agencies is a frustration for DOT staff. BMP implementation and long-term maintenance is a significant issue. Improved and consistent environmental training would be welcomed.

Next Steps

Further comments can be provided to Ehren Meister with DOT or to J.D. Solomon with CH2M HILL. Employees interested in keeping track of the EMP development process can go to the DOT internet site: http://www.ncdot.org/environment/development/management/. After the Division workshops are completed, the input from staff will be incorporated into the framework and EMP implementation strategies.